



## GARDEN AND FARM.

## HINTS FOR THE MONTH.

In the garden as well as the farm there is still employment for busy hands. Throughout the entire year they whose occupation is gardening find plenty to engage their whole time. This is more especially the case with those engaged in the nursery business, but for us and our agricultural friends generally there is little gardening after November. Some seasons an early winter forbids our gardening even so late as that. It is well for us then to give up every hour that we can spare to the garden in doing what is still to be done. We have to prepare for the near approach of winter, and we can also make preparation for the ensuing year.

THE GATHERING AND STORING OF VEGETABLES is now to be attended to. Walks and borders are to be cleaned and dressed. After this month they will require little labor for the few months that remain, and by keeping them neat and in good order now they will require less care in the early spring, when every hour will be so valuable for garden and farm.

TRENCH THE GROUND from which the crops have been removed. This we have always practised with great advantage. It cultivates the subsoil, pulverizes by exposing it to the frost and snow, and it will give us twelve or more inches of garden soil instead of six or eight. The advantages of a deep, mellow soil are known to all who are conversant with gardening. The greater portion of the subsoil brought to the surface in the fall, if it be for the first time, should be turned down again in the spring, so that the old surface soil be the seed beds for the young plants. But a portion of the mellowed subsoil mixed with the surface will freshen it, and the more manure you can apply to it so much the greater quantity of the subsoil may be advantageously used.

FALL MANURING the beds intended for some spring crop we have practised with great advantage. This we have found especially serviceable for carrots, parsnips and beets. Having dug the ground the right depth, we apply a good coat of manure, and then cover it up in ridges with earth from furrows trenched deep six feet apart. When the season for sowing the seed arrives the soil is dry and mellow, and it is tilled easily and expeditiously with a digging fork, and the manure being so thoroughly amalgamated with the earth, we have no forked roots.

SOWING RYE to be turned down in the spring should be attended to in ground not designed for being trenched. It does well when sown in October.

In the FARM every preparation should be made. November is a very uncertain month, though in it, too, we have often favorable weather fit for field work. There are autumn crops to be stored, and till they are secured there must be no intermission of our labor. Potatoes must be dug at the earliest fitting time. It is of great importance that this be done in dry weather. When the ground is dry and the weather is fair much more work is done, and done better than in muggy weather and muddy ground, and the potatoes are better throughout the season. Turnips continue growing throughout this month, so we prefer on the whole to leave them in the ground till November. Their growth is greater as the days and nights become colder. Farm stock should be well cared for, especially fattening stock, milch cows and young animals. It is of great importance to keep up their condition. Let cattle be housed in good condition and they will amply pay for their food. Keep the ploughs going. Be true to the old proverb.—"Keep the plough going and you will never want corn for your horses." Fall ploughing is an excellent preparation for the spring crops. Let the ploughing be strong and deep, no matter how rough and coarse the ploughed soil be left. The storms of winter will break down the large clods and heavy scores, and will make it mellow for the spring. You have all seen how frost enters into the stiffest clay banks and overcomes their cohesiveness.

Planting shade or fruit trees, if it be not thought better that it be deferred till the spring, should be attended to at once. When the wood of the trees is ripe you may

safely transplant them, though the leaves have not fallen. There is a difference of opinion as to the best time of planting, some advocating fall planting, that the transplanted trees, having taken root in the fall and early winter, will be better able to withstand the drought of summer. Others maintain that there is uncertainty in fall planting from the severity of our winter. Were the trees to be transplanted raised from the nursery bed in the fall and heeled in with due care and well covered and then transplanted in the spring, they would have the advantages of a fall planting with little of the risk, as, after being heeled in, they would form the rootlets that trees must form when transplanted, and they would at once commence growing on being planted in the spring. For planting fruit trees, at whatever time it be done, the ground should be well prepared.

Ass. Ed.

## The Horse.

## CARE OF HORSES.

All horses must not be fed in the same proportion, without regard to their ages, their constitution or their work—the propriety of such a practice is self-evident. Yet it is constantly done, and is the basis of disease of every kind.

Never use bad hay on account of its cheapness, because there is no proper nourishment in it.

Damaged corn is exceedingly injurious, because it brings on inflammation of the bowels and skin diseases.

Chaff is better for old horses than hay, because they can chew and digest it better.

Hay or grass alone will not support a horse under hard work, because there is not sufficient nutritive body in either.

When a horse is worked hard its food should be chiefly oats—if not worked hard its food should be chiefly hay, because oats supply more nourishment and flesh-making material than any other food—hay not so much.

Mix chaff with corn or beans, and do not give the latter alone, because it makes the horse chew his food more and digest it better.

For a saddle or coach horse half a peck of sound oats and eighteen pounds of good hay are sufficient. If the hay is not good add a quarter of a peck more oats. A horse which works harder may have rather more of each; one that works should have less.

Rack feeding is wasteful. The better plan is to feed with chopped hay from a manger, because the food is not then thrown about, and is more easily chewed and digested.

Sprinkle the hay with water that has salt dissolved in it, because it is pleasing to the animal's taste, and is more easily digested. A tablespoonful of salt in a bucket of water.

Oats should be bruised for an old horse, but not for a young one, because the former, through age and defective teeth, cannot chew them properly; the young horse can do so, and they are thus properly mixed with saliva and turned into wholesome nutriment.

## PLANK FLOORS RUINOUS TO HORSES.

Can't some genius invent some kind of stable floor that can be kept clean without too much labor and will not ruin the feet of horses standing upon them? If not, every horse-owner whose horse or horses are obliged to stand still much of the time had better have a yard convenient to the stable into which the horses can run when neither at work nor eating nor sleeping.

We have had some experience in this line. Our horses have not much to do in the winter season, and we have noticed a tendency in them to become lame, but as they got over it upon driving we paid but little attention to the matter. The past winter we kept but one horse, and, as a public conveyance ran between our place and office, we preferred to patronize that and let our horse stand in the stable. After the sleighing disappeared and the roads became bad he had but little exercise, and we noticed that he was becoming lame. Supposing that he would improve as soon as spring work commenced, we paid but little attention to it until he became so lame that he could not strike a trot, and his limbs seemed weak and tender, although we could find no sore or tender spot, nor where his limbs were swollen. We consulted a veterinary surgeon, who could neither find cause for lameness nor prescribe a remedy.

We determined to try an experiment. We made a fence enclosing a small plot of grass, and turned him out, cutting grass for him. Now for the results. For three or four weeks before turning him out he had been getting lamer and lamer until he became unable to trot. In one week from the time we turned him out

he could trot off quite lively, and now he has nearly recovered. He seemed to be lame in every foot and especially in his hind feet, and we have no doubt that standing idle on a plank floor caused his hoofs to become dry, hard and contracted so that they pressed upon the tender frog. We have here suggested one remedy for hard floors—namely, a yard. If any of our readers know of a substitute for plank floors that will obviate the difficulties we have presented we should be glad to hear from them.—*The American Rural Home.*

## FARM TEAMS.

The treatment of farm teams is a matter of great consequence to the farmer, for the same principle which requires that the driver of a steam engine should keep every part of his machine well oiled and in good adjustment, and that he should keep his boiler well supplied with fuel and with water, should actuate the farmer in keeping this most valuable and really expensive assistant to his labors in efficient condition by careful grooming, judicious feeding and attentive oversight.

Very much of the value and availability of the horse depends on the quality and quantity of his food, and on the manner in which it is given to him. Too much food at one time, too little at another, food of improper kinds or in a bad state of preparation are the foundation of one-half the ills that horse-flesh is heir to. There is no worse economy than the stinting of food or the administering of bad food because it is cheap. Also, there is no more wasteful practice than the giving of too rich and expensive food. Neither is there any greater source of loss in connection with the keeping of farm horses than the neglect to which they are systematically treated. The horse, even in the rudest state, is of a most delicate organization.

His powers are very great—greater than is generally supposed; but, in order to their development and to their long endurance, it is necessary that he be fed with the greatest care and with an ever-watchful judgment. Probably the capital invested in farm horses in the United States would go twice as far—that is, the animals would last in a useful condition twice as long—if they were thoroughly well fed and cared for.

At the National Horse Show at Springfield several years ago Mr. Lewis R. Brown, of New York, exhibited a four-in-hand team which trotted around the course in about three minutes. The united ages of the four amounted to more than one hundred years, and even the oldest of them remained useful for a long time after that. Indeed, Mr. Brown told me that he did not consider it of much importance that a horse should be less than twenty years old. Yet, as we look over the farms of even our best farming districts, how few useful teams do we find that are more than fourteen or fifteen years old. Deducting the years of their colthood, we see that the period of their possible usefulness is reduced fully one-half by careless and injudicious treatment, and especially by stingy or indiscreet feeding. To go over the whole range of directions for feeding, from the time when the mare is first got with foal until the foal is worn out by years of service, would require more space than can here be spared. Concerning farm horses the following directions from Herbert's "Hints" will be found useful:—

"With regard to mere farm horses, it is usually the habit to feed them entirely on hay or cut straw, with now and then a mash, giving them little or no oats or corn. It is certain, however, that this is a mistake. That the value of the work which the horse can do and of the horse himself, arising from his improved condition and increased endurance, will be materially raised, while the actual cost of his keep will not be very materially increased by the diminution of the quantity of the cheaper and less nutritious food given to him and the addition of a smaller or larger portion of the more nutritive grain, which furnishes stamina and strength in a degree greatly in excess of its own increased value, may be assumed as facts.

"Slow-working horses do not, of course, require so much nutriment of a high quality as those which are called on to do quick work and perform long distances; but, as a rule, all animals which have to do hard work and much of it must necessarily be so kept as to have hard flesh, and they cannot be so kept unless they are fed on hard grain."—*Waring's Handy Book of Husbandry.*

## HOW TO FIT COLLARS TO HORSE'S SHOULDERS.

It is very important to have a collar fit nicely and snugly to the shoulders of a horse. It enables him to work with a great deal more ease, and to apply a great deal more strength. It prevents galling and wounding, as the friction is avoided. Collars are so made, or should be so made, as to throw the chief force on the lower part of the shoulder. The horse can apply but little strength on the upper part, and, for this reason, breast-collars are coming greatly into vogue, as the strength is exerted on the lower part of the shoulder. But we started out to tell our readers how to make a new collar fit the shoulder of a horse. The collar should be purchased of the proper size. Just before putting it on the first time immerse it in water, letting it remain about a minute, and immediately put it on the horse, being careful to have the hames so adjusted at the top and bottom as to fit the shoulder, and then put the horse to work. The collar, by being wet, will adapt itself to the shoulder, and should dry on the horse.

When taken off it should be left in the same shape it occupied on the horse, and ever after you will have a snug-fitting collar and no wounds.—*Valley Farmer.*

## CAUSES AND CURE OF POLL EVIL.

Editor *Western Rural*:—I send a few words on the causes and treatment of inflammation of the neck and its concurrent extension—poll evil. The causes are—Carrying the check rein too tight, wet pastures, chronic indigestion and pressure from the main ligament on the first vertebra of the neck. It is seldom caused by a direct bruise.

Preventatives—The discarding of the check rein, the avoidance of wet pastures, if you feed cut grass give but little water and avoid frightening the horses when in the stable, thereby possibly causing him to strike his head.

To treat the malady—Apply a slight blistering liniment of iodine and cantharides with tincture of potassa once a day, and foment twice a day with strong soft soap suds hot. As soon as you find a fluctuating place lance the affected part effectually, and put into and to the bottom of the canal a piece of nitrate of silver nearly one half an inch long. Let it dissolve, and repeat every two weeks until healthy action is established, when the wound may be healed.

If the operation requires to be more extensive cut the main pipe or canal square lengthwise, beyond the extension of the cavity, to get a free discharge of the pus, which will enable it to heal at once.

If your subscriber at Oneida, Ill., who has a horse with a swelling on his neck, (*Western Rural*, of July 5 h), does not find the case yield to the treatment prescribed, he should cut at right angles on the withers through to the prolongation of the vertebra in order to cure his horse.

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## LAMPAS OR LAMPUS.

W. E. Mintzer, veterinary surgeon, St. Paul, Minn., says this complaint is common to all young horses, but it is cruel and unnecessary to burn or cauterize for it. By passing the finger nail up between the gums and the teeth it may be loosened, which is all that is necessary. But even this is not necessary, except in extreme cases, for if corn in the cob is fed to the animals for a few days the effort to shell it will cause the gum to be loosened just the same as with the finger. A horse has a strong memory, and, once burnt in the mouth, he is apt to be chary of your meddling with it in any way, and many ill-halter tricks are the consequence.

## VEGETABLE ORIGIN OF THE EPIZOOTIC.

The fungoid origin of the epizootic is treated of by Mr. Moorhouse, of New York City, in the *American Naturalist*. He found three distinct vegetable organisms in the nostrils besides the regular pus exuding therefrom. One of these was a minute lichen (*Necularia scruposa* of botanists), in every form of development and in large numbers, hundreds in a single drop. Another was an unknown species of *Aspergillus*, also in progress of development. The third form was a species unknown to the writer. It has not been hitherto discovered. In order to demonstrate that these spores were floating in the atmosphere, they were caught on moistened glass in the vicinity of the disease.

This does not prove that the fungi is the real cause of the disease. The spores may simply have found a favorable nidus for development in the matter given off by the disease. It is nevertheless interesting, as it brings the vegetable origin of the disease nearer towards demonstration, and, it is to be hoped, will be followed up by further experiments.